To: Frank Piccola, CALFED
From: Susan Hatfield, EPA
Re: PEIS comments

I am forwarding to you some general and a few specific comments on a number of the reports EPA was asked to review. These comments are very short and cursory, since it has taken me quite a while to go through the documents and begin to understand what was done for each. It would be very helpful if the alternatives were outlined in each, and a better explanation of the modeling assumptions was included. I hope that the fisheries and aquatic resources and the vegetation and wildlife authors can receive and report the modeling results in a concise form useful for both their analysis and for those of us needing to understand the conclusions. It is unclear to me whether I should spend more time on this group of reports, since I understand the modeling results and the reports themselves will change substantially by the next version. I look forward to receiving the next set in a more complete, understandable, and readable form.

Environmental Impacts Technical Report: Fisheries and Aquatic Resources

In General
This report does not include enough information to allow adequate impact assessment. The authors acknowledge that operations changes will affect flows, and that the addition of storage may have beneficial or negative impacts on flows and those processes, habitats, and species dependent on flows. It is particularly important that this PEIS assesses both the likely benefits and the likely and worst-case impact on the ecosystem of the Delta, the Bay and the Central Valley streams due to changes in flows in project-controlled and other affected streams as a result of additional storage and conveyance capacity. It appears that the basic modelling results available to the fisheries and aquatic resources team was not useful in accomplishing this task. DWRSIM modeling to explore the range of changes to operations of other facilities is necessary.

DWRSIM modeling with the ecosystem, water supply and water management goal of increasing water supply reliability during droughts is also necessary as part of the PEIS analysis This analysis will help identify the preferred alternative measures for both the fisheries and aquatic environmental impacts report and the vegetation and wildlife environmental impacts report.

Even with information on changes in operations of the entire system, however, this assessment may not be able to be entirely dependent on DWRSIM modeling results. Monthly average flow changes may be inadequate to understand the likely effects on current hydrology, such as river bed changes due to reservoir spills during a 5 day storm event.

Water Supply and Water Management

In General
DWRSIM modeling with the goal of providing better conditions for all water uses through drought periods is likely to reach different conclusions. Alternative 1, in particular, should be

H-000288

assessed using this goal. In addition, assumptions incorporating likely measures for improving water use efficiency in all years, and especially in drought years, should be included.

P.2..The second set of evaluation indicators includes reduced impacts from diversions, however, this does not appear to be fully taken into account in the alternative analysis. Increased flexibility in the timing for diversions is discussed as a benefit of storage options, but alternative conveyance options are not identified as alternative methods of accomplishing this.

P. 23. It appears that Table 23 is referred to twice, providing two different sets of information. The information on potential shifting of storage and other annual management changes that could be achieved is important, and should be assessed with the reoperation available through DWRSIM runs.

Groundwater

In General.

P. 6. "or ecosystem damage" should be added to the end of the second listed significance threshold.

P. 10. ERPP objectives and actions such as those which increase streamflows, restore natural floodplain and flood processes, restore riparian scrub, woodland and forest habitats, and restore perennial and seasonal wetland habitats could all benefit groundwater conditions. The assumption that conversion of agricultural land to restored habitat is likely to have only negative impacts on groundwater should be substantiated.

P. 19. In addition to impairing water supply opportunity, potential stream seepage losses could also impact instream flows and riparian and stream habitat. This should possibility should be assessed.

Bay-Delta Hydrodynamics and River Hydraulics

In General
It is unclear what impacts are targeted by this report. P. 9 states that the flow conditions were selected based on fish and wildlife concerns. This modeling could be useful, and helps meet the needs we have previously expressed to the Storage and Conveyance workgroup. However, the specific concerns should be stated, as well as the reasons why these conditions were picked based on the specific concerns. The information in this report does not appear to be complete enough to be useful to the fisheries and aquatic resources impact analysis effort.

Specific Comments
P. 18 & 19 Assumption that high flows are detrimental, and decreasing high flows is beneficial should be supported. What is "high flow"?

Summary tables should all include existing conditions as well as no-project conditions.

Tributary flow assessments are difficult to understand. Please explain why there are such high increases in discharge in the Feather River (page 109).

H-000290